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To All Vapor Recovery Component Manufacturers and Interested Stakeholders:

The Air Resources Board (ARB) staff is investigating a new approach for testing pressure vacuum (PV) vent valves at gasoline dispensing facilities (GDFs). This approach is based on the installation of a shutoff mechanism to isolate the PV valves at GDFs so that they can be tested in place. Currently, PV valves must be removed from the vent stack and bench tested per ARB's test procedure, TP-201.1E, **Leak rate and Cracking Pressure of Pressure/Vacuum Vent Valves** if quantitative testing is desired. The major criticism of the current procedure is that the removal will change the "as-is" status of the PV valves. In response ARB staff started to look at new approaches that will allow for in place testing of the PV valves and established the following criteria to validate the approach:

1. The PV valve must temporarily be isolated from the rest of the system during the test.
2. A procedure (leak check) to determine that the PV valve is isolated is required.
3. After testing, the PV valve and vent system must automatically return to their normal operating position in order to comply with State Fire Marshal and OSHA regulations.
4. Any device used for the above application must be compatible with gasoline vapors and resistant to extreme ambient conditions (UV light, temperature, etc.)

Two test concepts appear to meet the above criteria. The first concept requires the installation of two air-actuated bladders (Figure 1) and the second utilizes the installation of two air-actuated ball valves (Figure 2). In both concepts, these devices are installed in-line and can temporarily isolate the PV valve from the rest of the system. Two devices per test concept are required (see Figures 1 and 2) to ensure that PV valve is isolated. A constant supply of air or nitrogen is supplied to these devices to either inflate them (air-actuated bladders), or mechanically close them (air-actuated valves). This action would seal the air space between the devices so that a leak check can be conducted. A squeeze bulb is used to induce a vacuum (see Figures 1 and 2) in the air space. If the air space between these devices passes the leak check, then this indicates that the PV valve is now isolated from the rest of the system and can now be tested using TP-201.1E. When testing is completed, air or nitrogen is then released from the air-actuated bladders or valves and these devices will automatically return to

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their normal deflated or open positions. The approximate cost (not including installation) for the bladders and valves are shown below:

Technology	Approximate Cost
Bladder	\$20.00/each
Valve	\$500.00/each

We are requesting your comments on the appropriateness of the above concepts. Alternate concepts or technologies that could accomplish the test as outlined above will also be considered. Please send your comments or suggestions by no later than August 1, 2006, to

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If you have questions or require further information, please contact Sam Vogt at (916) 322-8922 or via email at svogt@arb.ca.gov or Joe Guerrero at (916) 324-9487 or via email at jguerrer@arb.ca.gov.

Figure 1
(Bladder type)

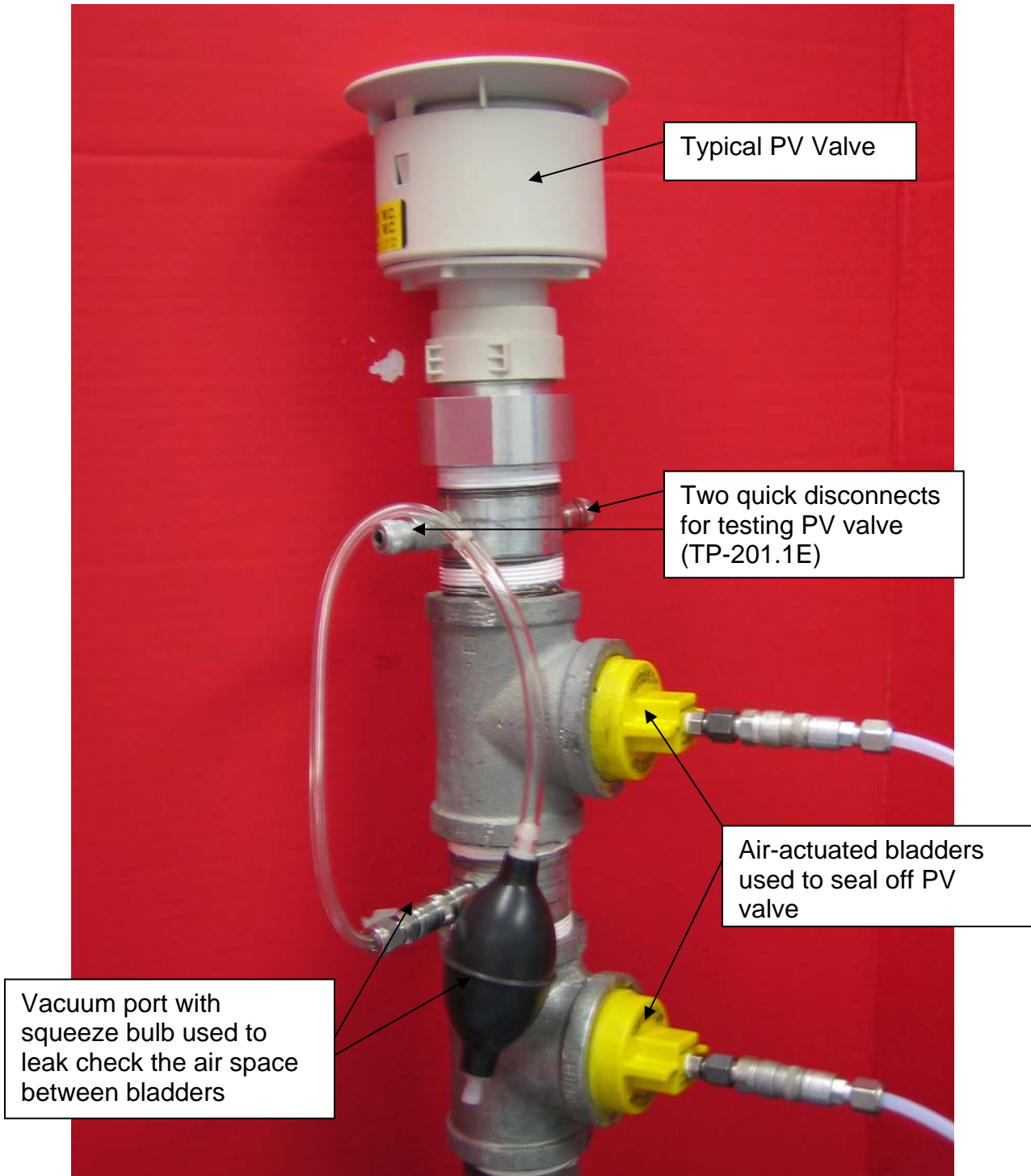


Figure 2
(Air-actuated ball valves)

